Journal of Ecology 1992, **80**, 883–886

Index

ORIGINAL PAPERS

Aarssen, L.W. & Clauss, M.J. Genotypic variation in fecundity allocation in *Arabidopsis thaliana*, 109

Ackerly, D.D. *see* **Bazzaz, F.A.**

Aerts, R., De Caluwe, H. & Konings, H. Seasonal allocation of biomass and nitrogen in four *Carex* species from mesotrophic and eutrophic fens as affected by nitrogen supply, 653

Aerts, R., Wallén, B. & Malmer, N. Growth-limiting nutrients in *Sphagnum*-dominated bogs subject to low and high atmospheric nitrogen supply, 131

Alvarez-Buylla, E.R. & Martínez-Ramos, M. Demography and allometry of *Cecropia obtusifolia*, a neotropical pioneer tree — an evaluation of the climax-pioneer paradigm for tropical rain forests, 275

Ashton, P.S. & Hall, P. Comparisons of structure among mixed dipterocarp forests of north-western Borneo, 459

Barkham, J.P. Population dynamics of the wild daffodil (*Narcissus pseudonarcissus*). IV. Clumps and gaps, 797

Bastow Wilson, J. *see* **Watkins, A.J.**

Bates, J.W. Influence of chemical and physical factors on *Quercus* and *Fraxinus* epiphytes at Loch Sunart, western Scotland: a multivariate analysis, 163

Bazzaz, F.A., Ackerly, D.D., Woodward, F.I. & Rochefort, L. CO_2 enrichment and dependence of reproduction on density in an annual plant and a simulation of its population dynamics, 643

Bell, S.A. *see* **Hill, M.O.**

Bennett, K.D., Boreham, S., Sharp, M.J. & Switsur, V.R. Holocene history of environment, vegetation and human settlement on Catta Ness, Lunnasting, Shetland, 241

Boose, E.R. *see* **Foster, D.R.**

Boreham, S. *see* **Bennett, K.D.**

Bradshaw, G.A. & Spies, T.A. Characterizing canopy gap stucture in forests using wavelet analysis, 205

Bradshaw, R. & Hannon, G. Climatic change, human influence and disturbance regime in the control of vegetation dynamics within Fiby Forest, Sweden, 625

Brown, V.K. *see* **Rees, M.**

Bruneau, A. *see* **Wheelwright, N.T.**

Campbell, B.D., Grime, J.P. & Mackey, J.M.L. Shoot thrust and its role in plant competition, 633

Causton, D.R. *see* **Dale, M.P.**

Clauss, M.J. *see* **Aarssen, L.W.**

Dale, M.P. & Causton, D.R. The ecophysiology of *Veronica chamaedrys*, *V. montana* and *V. officinalis*. I. Light quality and light quantity, 483

Dale, M.P. & Causton, D.R. The ecophysiology of *Veronica chamaedrys*, *V. montana* and *V. officinalis*. II. The interaction of irradiance and water regime, 493

Dale, M.P. & Causton, D.R. The ecophysiology of *Veronica chamaedrys*, *V. montana* and *V. officinalis*. III. Effects of shading on the phenology of biomass allocations — a field experiment, 505

Dale, M.P. & Causton, D.R. The ecophysiology of *Veronica chamaedrys*, *V. montana* and *V. officinalis*. IV. Effects of shading on nutrient allocations — a field experiment, 517

Dale, P. *see* **Silvertown. J.**

De Caluwe, H. *see* **Aerts, R.**

Dirzo, R., Horvitz, C.C., Quevedo, H. & López, M.A. The effects of gap size and age on the understorey herb community of a tropical Mexican rain forest, 809

Ericson, L. *see* **Wennström, A.**

Evans, D.F. *see* **Hill, M.O.**

Foster, D.R. Land-use history (1730–1990) and vegetation dynamics in central New England, USA, 753

Foster, D.R. & Boose, E.R. Patterns of forest damage resulting from catastrophic wind in central New England, USA, 79

Foster, D.R., Zebryk, T., Schoonmaker, P. & Lezberg, A. Post-settlement history of human land-use and vegetation dynamics of a *Tsuga canadensis* (hemlock) woodlot in central New England, 773

Fryer, G.I. *see* **Johnson, E.A.**

Furnish, R. *see* **Geber, M.A.**

Garnier, E. Growth analysis of congeneric annual and perennial grass species, 665

Geber, M.A., Watson, M.A. & Furnish, R. Genetic differences in clonal demography in *Eichhornia crassipes*, 329

Glaser, P.H. Raised bogs in eastern North America — regional controls for species richness and floristic assemblages, 535

Gosselink, J.G. *see* **Shaffer, G.P.**

Grime, J.P. *see* **Campbell, B.D.**

Grove, T.S. & Malajczuk, N. Nodule production and nitrogen fixation (acetylene reduction) by an understorey legume (*Bossiaea laidlawiana*) in *Eucalyptus* forest, 303

Hall, P. *see* **Ashton, P.S.**

Hann, D.W. *see* **Puettmann, K.J.**

Hannon, G. *see* **Bradshaw, R.**

Hibbs, D.E. *see* **Puettmann, K.J.**

Hik, D.S., Jefferies, R.L. & Sinclair, A.R.E. Foraging by geese, isostatic uplift and asymmetry in the development of salt-marsh plant communities, 395

Hill, M.O., Evans, D.F. & Bell, S.A. Long-term effects of excluding sheep from hill pastures in North Wales, I

Holtier, S. *see* **Silvertown, J.**

Horvitz, C.C. *see* **Dirzo, R.**

Hossaert-McKey, M. & Jarry, M. Spatial and temporal patterns of investment in growth and sexual reproduction in two stoloniferous species, *Lathyrus latifolius* and *L. sylvestris*, 555

Houle, G. Spatial relationship between seed and seedling abundance and mortality in a deciduous forest of north-eastern North America, 99

Houle, G. The reproductive ecology of *Abies balsamea*, *Acer saccharum* and *Betula alleghaniensis* in the Tantaré Ecological Reserve, Québec, 611

House, S.M. Population density and fruit set in three dioecious tree species in the Australian tropical rain forest, 57

Hutchings, M.J. *see* **Price, E.A.C.**

Jarry, M. *see* **Hossaert-Mckey, M.**

Jefferies, R.L. *see* **Hik, D.S.**

Johnson, E.A. & Fryer, G.I. Physical characterization of seed microsites — movement on the ground, 823

Johnson, J. *see* **Silvertown, J.**

Jurado, E. & Westoby, M. Seedling growth in relation to seed size among species of arid Australia, 407

Kitchen, S.G. *see* **Meyer, S.E.**

Konings, H. *see* **Aerts, R.**

Legg, C.J., Maltby, E. & Proctor, M.C.F. The ecology of severe moorland fire on the North York Moors: seed distribution and seedling establishment of *Calluna vulgaris*, 737

Leishman, M.R. & Westoby, M. Classifying plants into groups on the basis of associations of individual traits — evidence from Austalian semi-arid woodlands, 417

Lezberg, A. *see* **Foster, D.**

López, M.A. *see* **Dirzo, R.**

Lowman, M.D. Leaf growth dynamics and herbivory in five species of Australian rain-forest canopy trees, 433

Lusk, C. & Ogden, J. Age structure and dynamics of a podocarp broadleaf forest in Tongariro National Park, New Zealand, 379

Mackey, J.M.L. *see* **Campbell, B.D.**

Maillette, L. Plasticity of modular iteration in *Potentilla anserina*, 231

Maillette, L. Seasonal model of modular growth in plants, 123

Malajczuk, N. *see* **Grove, T.S.**

Malmer, N. *see* **Aerts, R.**

Maltby, E. *see* **Legg, C.J.**

Marrs, R.H. *see* **Morecroft, M.D.**

Marshall, C. *see* **Price, E.A.C.**

Martínez-Ramos, M. *see* **Alvarez-Buylla, E.R.**

Merrens, E.J. & Peart, D.R. Effects of hurricane damage on individual growth and stand structure in a hardwood forest in New Hampshire, USA, 787

Meyer, S.E. & Kitchen, S.G. Cyclic seed dormancy in the short-lived perennial *Penstemon palmeri*, 115

Milliken, W. *see* **Thompson, J.**

Molau, U. & Prentice, H.C. Reproductive system and population structure in three arctic *Saxifraga* species, 149

Montaña, C. The colonization of bare areas in two-phase mosaics of an arid ecosystem, 315

Morecroft, M.D., Marrs, R.H. & Woodward, F.I. Altitudinal and seasonal trends in soil nitrogen mineralization rate in the Scottish Highlands, 49

Myster, R.W. & Pickett, S.T.A. Dynamics of associations between plants in ten old fields during 31 years of succession, 291

Ogden, J. *see* **Lusk, C.**

Padisák, J. Seasonal succession of phytoplankton in a large shallow lake (Balaton, Hungary) — a dynamic approach to ecological memory, its possible role and mechanisms, 217

Peacock, P.P. *see* **Young, T.P.**

Peart, D.R. *see* **Merrens, E.J.**

Pickett, S.T.A. *see* **Myster, R.W.**

Prentice, H.C. *see* **Molau, U.**

Price, E.A.C. & Hutchings, M.J. Studies of growth in the clonal herb *Glechoma hederacea*. II. The effects of selective defoliation, 39

Price, E.A.C., Marshall, C. & Hutchings, M.J. Studies of growth in the clonal herb *Glechoma hederacea*. I. Patterns of physiological integration, 25

Proctor, J. *see* **Scott, D.A.**

Proctor, J. *see* **Thompson, J.**

Proctor, M.C.F. *see* **Legg, C.J.**

Proctor, M.C.F. Regional and local variation in the chemical composition of ombrogenous mire waters in Britain and Ireland, 719

Puettmann, K.J., Hibbs, D.E. & Hann, D.W. The dynamics of mixed stands of *Alnus rubra* and *Pseudotsuga menziesii*: extension of size–density analysis to species mixture, 449

Quevedo, H. *see* **Dirzo, R.**

Ratter, J.A. *see* **Thompson, J.**

Ray, T.S. Foraging behaviour in tropical herbaceous climbers (Araceae), 189

Rees, M. & Brown, V.K. Interactions between invertebrate herbivores and plant competition, 353

Rejmanek, M. *see* **Shaffer, G.P.**

Rochefort, L. *see* **Bazzaz, F.A.**

Sasser, C.E. *see* **Shaffer, G.P.**

Schoonmaker, P. *see* **Foster, D.**

Scott, D.A. *see* **Thompson, J.**

Scott, D.A., Proctor, J. & Thompson, J. Ecological studies on a lowland evergreen rain forest on Maracá Island, Roraima, Brazil. II. Litter and nutrient cycling, 705

Shaffer, G.P., Sasser, C.E., Gosselink, J.G. & Rejmánek, M. Vegetation dynamics in the emerging Atchafalaya Delta, Louisiana, USA, 677

Sharp, M.J. *see* **Bennett, K.D.**

Silvertown, J., Holtier, S., Johnson, J. & Dale, P. Cellular automaton models of interspecific competition for space — the effect of pattern on process, 527

Sinclair, A.R.E. *see* **Hik, D.S.**

Spies, T.A. *see* **Bradshaw, G.A.**

Switsur, V.R. *see* **Bennett, K.D.**

Thompson, J. *see* **Scott, D.A.**

Thompson, J., Proctor, J., Viana, V., Milliken, W., Ratter, J.A. & Scott, D.A. Ecological studies on a lowland evergreen rain forest on Maracá Island, Roraima, Brazil. I. Physical environment, forest structure and leaf chemistry, 689
Viana, V. *see* **Thompson, J.**
Wallén, B. *see* **Aerts, R.**
Watkins, A.J. & Bastow Wilson, J. Fine-scale community structure of lawns, 15
Watson, M.A. *see* **Geber, M.A.**
Wennström, A. & Ericson, L. Environmental heterogeneity and disease transmission within clones of *Lactuca sibirica*, 71
Westoby, M. *see* **Jurado, E.**
Westoby, M. *see* **Leishman, M.R.**
Wheelwright, N.T. & Bruneau, A. Population sex ratios and spatial distribution of *Ocotea tenera* (Lauraceae) trees in a tropical forest, 425
Williams, R.J. Gap dynamics in subalpine heathland and grassland vegetation in south-eastern Australia, 343
Woodward, F.I. *see* **Bazzaz, F.A.**
Woodward, F.I. *see* **Morecroft, M.D.**
Young, T.P. & Peacock, M.M. Giant senecios and alpine vegetation of Mount Kenya, 141
Zebryk, T. *see* **Foster, D.**

PRESIDENTIAL ADDRESS

Grubb, P.J. A positive distrust in simplicity — lessons from plant defences and from competition among plants and among animals, 585

ESSAY REVIEW

Cheplick, G.P. Sibling competition in plants, 567

BIOLOGICAL FLORA OF THE BRITISH ISLES

Atkinson, M.D. *Betula pendula* Roth (*B. verrucosa* Ehrh.) and *B. pubescens* Ehrh., 837
Listing, 879

OBITUARY

Arthur Roy Clapham, CBE, FRS (1904–1990), 361

BOOK REVIEWS

Akerele, O., Heywood, V. and Synge, H. *The Conservation of Medicinal Plants*, 181
Atkinson, D. *Plant Root Growth: an Ecological Perspective*, 367
Bawa, K. and Hadley, M. *Reproductive Ecology of Tropical Forest Plants*, 871
Begon, M., Fitter, A.H. and Macfadyen, A. *Advances in Ecological Research*, 368
Borota, J. *Tropical Forests: Some African and Asian Case Studies of Composition and Structure*, 577
Bresser, A.H.M. and Salomons, W. *Acidic Precipitation: International Overview and Assessment*, 369
Burdon, J.J. and Leather, S.R. *Pests, Pathogens and Plant Communities*, 181
Cannell, M.G.R., Malcolm, D.C. and Robertson, P.A. *The Ecology of Mixed-Species Stands of Trees*, 871
Chen, Y. and Hadar, Y. *Iron Nutrition and Interactions in Plants*, 873
Cockburn, A. *An Introduction to Evolutionary Ecology*, 370
DeAngelis, D.L. *Dynamics of Nutrient Cycling and Food Webs*, 577
Delcourt, H.R. and Delcourt, P.A. *Quaternary Ecology: A Paleoecological Perspective*, 182
Esser, G. and Overdieck, D. *Modern Ecology: Basic and Applied Aspects*, 873
Evans, D. *A History of Nature Conservation in Britain*, 183
Falińska, K. *Plant Demography in Vegetation Succession*, 578
Gomez-Pompa, A., Whitmore, T.C. and Hadley, M. *Rainforest Regeneration and Management*, 184
Harris, E. and Harris, J. *Wildlife Conservation in Managed Woodlands and Forests*, 579
Holland, M.M., Risser, P.G. and Naiman, R.J. *Ecotones — the Role of Landscape Boundaries in the Management and Restoration of Changing Environments*, 371
Kozlowski, T.T., Kramer, P.J. and Pallardy, S.G. *The Physiological Ecology of Woody Plants*, 372
Kuiper, P.J.C. and Bos, M. Plantago: *A Multidisciplinary Study*, 874
Mann, K.H. and Lazier, J.R.N. *Dynamics of Marine Ecosystems: Biological–Physical Interactions in the Oceans*, 580
Mathieson, A.C. and Nienhuis, P.H. *Intertidal and Littoral Ecosystems*, 875
Mooney, H.A., Medina, E., Schindler, D.W., Schulze, E.-D. and Walker, B.H. *Ecosystem Experiments*, 373
Moore, P.D., Webb, J.A. and Collinson, M.E. *Pollen Analysis*, 876
Peters, R.H. *A Critique for Ecology*, 374
Prince, S.D., Justice, C.O. and Los, S.O. *Remote Sensing of the Sahelian Environment*, 580
Risser, P.G. *Long-term Ecological Research: An International Perspective*, 581
Rohrig, E. and Ulrich, B. *Temperate Deciduous Forests*, 877
Roth, I. *Leaf Structure of a Venezuelan Cloud Forest in Relation to Microclimate*, 375
Shane, L.C.K. and Cushing, E.J. *Quaternary Landscapes*, 375
Spellerberg, I.F., Goldsmith, F.B. and Morris, M.G. *The Scientific Management of Temperate Communities for Conservation*, 186
Spellerberg, I.F. *Monitoring Ecological Change*, 185
Yablokov, A.V. and Ostroumov, S.A. *Conservation of Living Nature and Resources*, 186
Young, A.M. *Sarapiqui Chronicle: A Naturalist in Costa Rica*, 582

SHORT REVIEWS

Ambasht, R.S. *A Text Book of Plant Ecology*, 187

Barnes, R.S.K. and Mann, K.H. *Fundamentals of Aquatic Ecology*, 376

Cox, P.A. and Banack, S.A. *Islands, Plants and Polynesians: An Introduction to Polynesian Ethnobotany*, 879

Croker, R.A. *Pioneer Ecologist: The Life and Work of Victor Ernest Shelford, 1877–1968*, 376

Dickson, J.H. *Wild Plants of Glasgow*, 583

Henderson-Sellers, A. and Pitman, A.J. *Vegetation and Climate Interaction in Semiarid Regions*, 376

Mabberley, D.J. *Tropical Forest Ecology*, 377

Moore, D.M. *The Guinness Guide to Plants of the World*, 879

Nelson, E.C. and Walsh, W. *The Burren*, 583

Pielou, E.C. *After the Ice Age*, 187

Rheinheimer, G. *Aquatic Microbiology*, 583

Rose, F., Stern, R.C., Matcham, H.W. and Coppins, B.J. *Atlas of Sussex Mosses, Liverworts and Lichens*, 879

Smith, J.P., Appleby, P.G., Battarbee, R.W., Dearing, J.A., Flower, R., Haworth, E.Y., Oldfield, F. and O'Sullivan, P. *Environmental History and Palaeolimnology*, 377

Steinberg, T. *Nature Incorporated: Industrialisation and the Waters of New England*, 377

Vakhrameev, V.A. *Jurassic and Cretaceous Floras and Climates of the Earth*, 188

Werner, P.A. *Savanna Ecology and Management: Australian Perspectives and Intercontinental Comparisons*, 583